

## **11.0 OTHER CONSIDERATIONS**

### **11.1 NATIONAL STANDARDS**

The analyses in this document are consistent with the National Standard (NS) guidelines set forth in the 50 CFR part 600 regulations. The preferred alternatives will reduce the incidental capture and post-release mortality of sea turtles and marine mammals and may also benefit other bycatch species by reducing hook trauma and post hooking mortality. NOAA Fisheries continues to work in the international community to protect highly migratory species in the Atlantic Ocean throughout their range, while also implementing domestic measures that are consistent with domestic legislation.

This proposed rule would be consistent with NS 1, which provides that conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from the fishery. This proposed rule would reduce sea turtle interactions, as required under the ESA, while allowing the pelagic longline fishery to continue, consistent with international management and conservation of the target species. The analyses contained in this document are based on the best scientific information available (NS 2), including preliminary NED experiment results and self-reported, observer, and stock assessment data, which facilitate the management of these species throughout their ranges (NS 3). With respect to NS 4, none of the preferred alternatives discriminate between residents of different states or allocate or assign fishing privileges. The reopening of the NED area will have positive impacts for fishermen living in the northeast United States. While gear modifications are proposed both inside and outside the NED area, these modifications are consistent with NS 4 and necessary as conservation measures, to reduce the bycatch and bycatch mortality of sea turtles in the pelagic longline fishery for Atlantic HMS. Consistent with NS 5, the preferred alternatives consider efficiency where practicable, specifically in that they would be applied fishery-wide and incorporate flexibility in the choice of hook and bait combinations. NOAA Fisheries believes that vessel operators will be able to select efficient hook and bait combinations appropriate for specific target species. Moreover, reopening the NED may increase the efficiency of the distant water fleet in that vessels will be able to return to familiar fishing grounds with hook treatments that may increase catches over historical averages. With regard to NS 6, the preferred alternatives take into consideration variations among, and contingencies in, the fishery, fishery resources, and catches by providing for a choice in hook and bait combinations. These alternatives should be flexible enough to be changed under the FMP framework to accommodate biological, social, and economic variability. NOAA Fisheries would continue data collection programs with respect to this fishery in order to assess the effectiveness of management measures. As required by NS 7 and NS 8, NOAA Fisheries also considered the costs and benefits of the alternatives using social and economic inputs in Chapters 4, 6, 7, 8, and 9 of this document. As reflected in those chapters, the preferred alternatives would impose costs upon the industry and have potential administrative and enforcement costs. In analyzing and comparing the ecological, economic, and social impacts of various alternatives, including the no action alternative, NOAA Fisheries has concluded that the benefits of the preferred alternatives are real

and substantial relative to the costs. The preferred alternatives do not result in unnecessary duplication and, where practicable, NOAA Fisheries has considered ways to minimize costs while addressing conservation and management needs. Specifically, NOAA Fisheries is preferring gear modification alternatives, which will sufficiently reduce sea turtle interactions in compliance with the ESA, and not preferring alternatives with greater costs, such as time and area closures. Consistent with NS 8, NOAA Fisheries has considered the impacts of these actions on fishing communities in Chapter 9 and has minimized those impacts to the extent practicable. This rulemaking specifically focuses on NS 9. The preferred alternatives are expected to reduce sea turtle interactions sufficiently to ensure compliance with the ESA. As reflected in Chapters 4, 6, and 9, NOAA Fisheries has analyzed the ecological impacts of various bycatch and bycatch mortality reduction alternatives on bycatch and protected species and related economic and social impacts, as well as administrative, enforcement, and management considerations. Based on these analyses and in consideration of the other national standards, NOAA Fisheries has concluded that the preferred alternatives minimize bycatch and mortality of such bycatch to the extent practicable, as required under NS 9. In addition, this action would not require fishermen to travel greater distances, work in bad weather, or otherwise, in an unsafe manner (NS 10).

## **11.2 CONSIDERATION OF MAGNUSON-STEVENSON ACT SECTION 304 (G) MEASURES**

### **11.2.1 Evaluation of Possible Disadvantage to U.S. Fishermen in Relation to Foreign Competitors**

The U.S. pelagic longline fleet in the Atlantic captures sea turtles at a rate estimated to average 912 loggerheads and 846 leatherbacks per year, based on observed takes and total reported effort from 1992 to 2002. Most of these takes occur on the high seas, rather than within the U.S. EEZ. The U.S. fleet is a small part of the international fleet that competes on the high seas for catches of tunas and swordfish. Although the U.S. fleet landed as much as 35 percent of the swordfish from the North Atlantic (north of 5°N. latitude) in 1990, this proportion decreased to 24.27 percent of regional catches by 2001. For tunas, the U.S. proportion of total Atlantic landings was 23 percent in 1990, decreasing to 9.28 percent by 2001. The U.S. fleet accounts for virtually none of the landings of swordfish (0.3 percent) and tuna (0.005 percent) from the Atlantic Ocean south of 5° N. latitude, and does not operate at all in the Mediterranean Sea. Tuna and swordfish landings by foreign fleets operating in the tropical Atlantic and Mediterranean, are greater than the catches from the north Atlantic area where the U.S. fleet operates. Even within the area where U.S. fleet operates, the U.S. portion of fishing effort, in numbers of hooks fished is less than 10 percent of the entire international fleet's effort, and likely less than that due to differences in reporting effort between ICCAT countries (NMFS, 2001). Since other ICCAT nations do not monitor incidental catches of sea turtles, an exact assessment of their impact is not possible. High absolute numbers of sea turtle catches in the foreign fleets have been reported from other sources, however (NMFS, 2001). If the sea turtle catch rates of foreign fleets, per hook, or even per pound of swordfish landed, are similar to the catch rates of the American fleet,

then the American fleet may represent less than one-tenth and certainly no more than one-third of the total catch and mortality of sea turtles in North Atlantic longline fisheries.

Many sources of anthropogenic mortality of sea turtles are outside of U.S. jurisdiction and control. Mortality in the domestic and foreign longline fisheries is just one of the numerous factors affecting sea turtle populations in the Atlantic. There is a concern that reduced U.S. catch of Atlantic swordfish may eventually result in increased sea turtle interactions with foreign longline vessels. U.S. vessels fishing the NED area have landed approximately 20 percent of the U.S. swordfish quota in recent years. Thus, reopening the NED area could result in an increased U.S. swordfish catch as compared to landings from recent years, and may potentially allow the U.S. to retain its allocation of swordfish. A reduction in U.S. fishing effort could eventually result in a reduced allocation for U.S. vessels under the ICCAT catch allocation scheme and could make the implementation of international conservation efforts more difficult if the U.S. role in swordfish management is diminished. A reduced presence in the fishery might also eliminate the option of gear or other experimentation with the U.S. longline fleet, making it difficult to find incidental take reduction solutions which could be transferred to other longlining nations to effect a global reduction in sea turtle takes by pelagic longline gear. NOAA Fisheries is not aware of any foreign fleets that are currently employing sea turtle conservation measures. In the absence of a domestic fishing fleet subject to sea turtle conservation measures, foreign vessels would likely increase their fishing effort in the NED area, presumably resulting in increased overall sea turtle mortality.

U.S. fishermen could be directly disadvantaged by the preferred alternatives in this document compared to foreign competitors in that they will be limited to specific hook and bait requirements while foreign competitors will not. Additionally, U.S. fishermen currently have other regulations modifying their gear and their methods of fishing while foreign competitors do not. However, NOAA Fisheries anticipates that these modifications combined with the proposed measures will prove to be effective at reducing sea turtle interactions and that other nations will adopt these modifications, thereby eliminating any competitive disadvantage.

### **11.2.2 Provide U.S. Fishing Vessels Reasonable Opportunity to Harvest Quota**

The preferred alternatives in this document would not prevent U.S. commercial fishermen from the opportunity to land the quotas allocated to them. The proposed regulations would require pelagic longline fishermen to possess or use only specific hook and bait combinations, and to possess and use additional release and disentanglement gear. The preferred alternatives were crafted, in part, to minimize disruptions to fishing activities, such as those that would occur with large scale area closures, and allow fishermen continuing opportunities to harvest quotas.

As of November 2003, approximately 235 tuna longline limited access permits had been issued. In addition, approximately 203 directed swordfish limited access permits, 100 incidental swordfish limited access permits, 249 directed shark limited access permits, and 357 incidental shark limited access permits had been issued. Because vessels authorized to fish for swordfish

and tunas with pelagic longline gear must possess a tuna longline permit, a swordfish permit (directed or incidental), and a shark permit (directed or incidental), the maximum number of vessels permitted to use pelagic longline gear to fish for HMS is 235 (the number of tuna longline permits issued). Only a few of these fishermen actually report fishing with pelagic longline gear in logbooks (considered “active”). In 2002, 148 fishermen reported fishing for HMS with pelagic longline in the pelagic logbook. These data indicate that there is still an opportunity for fishermen with permits to increase effort in HMS fisheries and thus fully land the quotas allocated to U.S. fishermen.

### **11.2.3 Pursue Comparable International Fishery Management Measures**

Section 202(h) of the Magnuson-Stevens Act calls for the Secretary of State, in cooperation with the Secretary of Commerce, to seek international agreements to establish standards and measures for bycatch reduction that are comparable to the standards and measures applicable to U.S. fishermen if they conclude that it is necessary and appropriate. On September 18, 2000, NMFS determined that seeking international agreements with foreign nations conducting pelagic longline fishing operations for Atlantic and Pacific highly migratory species was necessary to protect endangered and threatened sea turtles. Furthermore, the June 14, 2001, BiOp requires NOAA Fisheries to pursue bilateral or multilateral agreements for the protection and conservation of sea turtles with other nations and to translate the sea turtle handling and release guidelines into several languages for distribution throughout the Atlantic and Mediterranean.

Dominant fisheries in the Atlantic are conducted by vessels from Brazil, Canada, Japan, Portugal, Spain, Taiwan, the United States, Uruguay and the nations of the Caribbean. The United States is at the forefront of conservation on this issue. NOAA Fisheries currently requires U.S. longliners to cut away the line as close to the hook as possible on any sea turtle that is caught during fishing operations. A preferred alternative in this document will require additional gear that will facilitate the removal of all fishing gear from sea turtles and other incidentally caught species which may significantly increase their chances of survival after being released. The United States hopes to transfer some of these techniques and fishing methods to other countries with longline fleets that incidentally capture sea turtles. To support this goal, the United States supported a workshop in February 2003 consisting of technical experts on sea turtle biology and longline fishery operations from interested nations in order to share information and discuss possible solutions to reduce incidental capture of marine turtles in these fisheries. In January 2004, the Northeast Distant Waters Longline Research ad hoc advisory group met in Miami, Florida. The purpose of this meeting was to present a summary of the 2001 and 2002 NED pelagic longline sea turtle bycatch mitigation research and the preliminary results for the 2003 research, and to discuss future research needs. Also in January 2004, the IATTC-CIAT Bycatch Working Group met in Kobe, Japan. The purpose of U.S. attendance at this meeting was to present results of sea turtle mitigation research by the U.S, to hear research results on bycatch mitigation from other countries, to encourage IATTC countries to evaluate or adopt sea turtle mitigation technology in their fisheries, and to address other bycatch issues in longline fisheries.

Additionally, the Inter-American Convention for the Protection and Conservation of Sea Turtles ("Inter-American Convention") was concluded on September 5, 1996, in Salvador, Brazil, and entered into force in May 2001. This is the first international agreement devoted solely to the protection of sea turtles. The Inter-American Convention calls for the Parties to establish national sea turtle conservation programs. Each party will agree to implement broad measures for the conservation of sea turtles, including the use of turtle excluder devices in commercial shrimp trawl vessels and the mitigation of impacts on sea turtles from other fisheries.

#### **11.2.4 Consider Traditional Fishing Patterns and the Operating Requirements of the Fisheries**

In the late 1800s, commercial fishermen in New England were pursuing swordfish, primarily with harpoons and targeting the large swordfish then available in surface waters. Pelagic longline fishing, both domestic and international, began in earnest in the North Atlantic Ocean in the early 1960s. The introduction of this gear enabled access to swordfish in deeper waters and opened new fishing areas. U.S. pelagic longline vessels follow the fish throughout their migratory range along the East Coast of the United States and up to the Grand Banks, and now catch approximately 98 percent of the U.S. Atlantic swordfish landings.

The preferred hook and bait combinations in this action were developed and tested in the NED experiment in an effort to reduce interactions with and post-release mortality of sea turtles while maintaining levels of target catch. To the extent that the preferred alternatives will require the use of specific hook and bait combinations, they may alter traditional fishing patterns. However, because this action would provide for a choice between hook and bait combinations, NOAA Fisheries does not expect a significant impact to fishing patterns. The other measures proposed in this rule are not expected to affect traditional fishing patterns or disrupt the operations of the HMS fisheries.

## **References Cited in Chapter 11**

- NOAA Fisheries. 2001. Stock assessments of loggerhead and leatherback sea turtles and an assessment of the impact of the pelagic longline fishery on the loggerhead and leatherback sea turtles of the Western North Atlantic. U.S. Department of Commerce, National Marine Fisheries Service, Miami, FL, SEFSC Contribution PRD-00/01-08.
- NOAA Fisheries. 2003. 2003 Stock assessment and fishery evaluation for Atlantic highly migratory species. U.S. Department of Commerce, National Marine Fisheries Service, Silver Spring, MD.